

**ABSTRACT**

A method for synchronizing a multi-mode base station using one clock, when the systems to be synchronized are a GSM-type telecommunications system, for instance a GSM or EDGE system, and a WCDMA-type telecommunications system. In the method, the clock of the WCDMA-type system or a multiple thereof is selected as the system clock of the multi-mode base station, the system clock of the GSM-type system is implemented using multiples of the frequency of the selected clock, and the frame structure of the GSM-type system is synchronized at intervals of thirteen frames or a multiple of thirteen frames.

(Figure 6)